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10/680,735	10/06/2003	William F. McWalter	SUNMP152	5300

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EXAMINER	
FRANKLIN, RICHARD B	
ART UNIT	**PAPER NUMBER**
2181	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	**Application No.** 10/680,735	**Applicant(s)** MCWALTER ET AL.	
	Examiner Richard Franklin	**Art Unit** 2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 16 January 2007.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1,3-9 and 21-29 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1,3-9 and 21-29 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1, 3 – 9, and 21 – 29 are pending.

Claim Objections

2. Claim 21 is objected to because of the following informalities:

- Claim 21: The claim recites "without regard a type of the physical device" in line 9. It appears the word "to" in that phrase. The Examiner has interpreted the limitation to read "without regard ***to*** a type of the physical device" (emphasis added).

Appropriate correction is required.

Claim Rejections - 35 USC § 112 1st Paragraph

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 3 – 9 and 21 – 29 are rejected under 35 U.S.C. 112, 1st paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As per claim 1, lines 9 – 11 "***a logical device code segment defined to only enable a particular type of dimensional control***" (emphasis added). There are two ways to interpret this limitation. The first is that the logical device code segment is defined to *enable only* a particular type of dimensional control and no other type of dimensional control. The second interpretation is that the logical device code segment is defined to *only* enable a particular type of dimensional control and is not able to perform any other function. Neither interpretations of this limitation are supported by the original specification. Therefore, the limitation is new matter. The specification describes that the logical device code segment is defined to enable a dimensional control (Original Specification; Page 10 Line14 – Page 11 Line 2).

According to the first interpretation presented above, the specification does not teach that the logical device code segment is defined to *enable only* a particular type of dimensional control and no other type of dimensional control. In fact, the original specification seems to teach away from this enabling *only* a particular dimensional control in stating on page 19 lines 7 – 10 that "the present embodiments are to be considered as illustrative ***and not restrictive***, and the invention is ***not to be limited to the details given herein***" (emphasis added).

According to the second interpretation presented above, the specification does not teach that the logical device code segment is defined to *only* enable a particular type of dimensional control and is not able to perform any other function. In fact, the original specification seems to teach away from this *only* enabling a particular dimensional control in stating on page 10 lines 17 – 19 that "the logical device 302 can be a one-dimensional logical device that is ***capable of communicating with the physical device code*** 304" and on page 10 lines 20 – 22 that "… ***the application***

program 300 can advantageously communicate with the logical device 302 ..." (emphasis added).

In light of the above, the original specification does not convey that at the time the application was filed, the inventor(s) had possession of the claimed invention.

As per claim 1, lines 21 – 26 recite "wherein the logical device code segment is defined for a particular type of dimensional control and ***not for controlling any particular property of the physical device or properties of other physical devices***, thus the logical device code segment provides the application code segment a capability to communicate with a plurality of physical devices, so long as each of the physical devices has device data with the particular type of dimensional control" (emphasis added). This limitation is not supported by the original specification and is therefore new matter. The specification does not describe that the logical device code segment cannot control any property of the physical device or properties of other physical devices. Absence in the specification does not constitute support of a negative limitation. Therefore, the original specification does not convey that at the time the application was filed, the inventor(s) had possession of the claimed invention.

As per claim 21, lines 5 – 6 recite "... the logical device control being defined ***to control only a particular dimensional manipulation***" (emphasis added). This limitation is not supported by the original specification and is therefore new matter. The specification does describe that the logical device control is defined to control a dimensional control (Original Specification; Page 10 Line14 – Page 11 Line 2), but does not teach that the logical device control is defined to control *only* a particular dimensional control. In fact, the original specification seems to teach away from this controlling *only* a particular dimensional manipulation in stating on page 19 lines 7 – 10 that "the present embodiments are to be considered as illustrative ***and not restrictive***, and the invention is ***not to be limited to the details given herein***" (emphasis added). Therefore, the original specification does not convey that at the time the application was filed, the inventor(s) had possession of the claimed invention.

As per claim 21, lines 10 – 11 recite, "wherein the logical device control ***only communicates with the device data associated with the particular dimension manipulation***" (emphasis added). There are two ways to interpret this limitation. The first is that the logical device control *only* communicates with the device data and performs no other function, because of the closed language of "only." The second interpretation is that the *only communications* the logical device control performs are with the device data. Neither interpretations of this limitation are supported by the original specification. Therefore, the limitation is new matter. The specification describes that the logical device control communicates with the physical device code (Original Specification; Page 10 Lines 17 – 20).

According to the first interpretation presented above, the specification does not teach that the *only* function the logical device control performs is to communicate with the device data. In fact, the original specification seems to teach away from communicating *only* with the device data in stating on page 10 lines 17 – 20 that "the logical device 302 can be a one-dimensional logical device that is ***capable of communicating with the physical device code*** 304" and on page 10 lines 20 – 22 that "… ***the application program 300 can advantageously communicate with the logical device 302*** …" and finally on page 11 lines 3 – 5 "… Figure 4A is a block diagram showing ***a one-dimensional logical device utilized to communicate with a one-dimensional slider control*** …" (emphasis added). Therefore, specification teaches that the logical device control performs other functions that are not communications with the device data.

According to the second interpretation presented above, the specification does not teach that the *only communication* the logical device control performs is with the device data. In fact, the original specification seems to teach away from communicating *only* with the device data in stating on page 10 lines 17 – 20 that "the logical device 302 can be a one-dimensional logical device that is ***capable of communicating with the physical device code*** 304" and on page 10 lines 20 – 22 that "… ***the application program 300 can advantageously communicate with the logical device 302*** …" and finally on page 11 lines 3 – 5 "… Figure 4A is a block diagram showing ***a one-dimensional logical device utilized to communicate with a one-dimensional slider control*** …" (emphasis added). Therefore, specification teaches that the logical device control performs other communications that are not with the device data.

In light of the above, the original specification does not convey that at the time the application was filed, the inventor(s) had possession of the claimed invention.

Claim Rejections - 35 USC § 112 2nd Paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 3 – 9, and 21 – 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the manipulation" in line 7 of the claim. There is insufficient antecedent basis for this limitation in the claim.

The Examiner has interpreted the limitation to refer to "a manipulation."

Claim 1 recites the limitation "a logical device code segment defined to ***only enable a particular type of dimensional control***" (emphasis added) in lines 9 – 10 of the claim. Because of the closed language of "only," this limitation can be interpreted as the logical device code *only enables* a particular type of dimensional control and does not perform any other function. However, the claim also recites that the logical device code communicates with the physical device code segment and identifies the device data for interfacing with the particular type of dimensional control (lines 10 – 14). It is not clear how the logical device code segment can *only enable* a particular type of dimensional control and perform the other claim functions.

Claim 21 recites the limitation "wherein the logical device control ***only communicates*** with the device data associated with the particular dimensional manipulation" (emphasis added) in lines 10 – 11 of the claim. Because of the closed language of "only," this limitation can be interpreted as the logical device control *only communicates* with the device data and does not perform any other function. However, the claim also recites that the logical device control controls a particular dimensional manipulation (lines 5 – 6 of the claim), is in communication with an application (lines 7 – 9 of the claim), and communicates with a plurality of physical devices having device data (lines 11 – 13 of the claim). It is not clear how the logical device control can *only communicate* with the device data yet still perform the other claimed functions.

Claim 21 recites the limitation "wherein the logical device control ***only communicates with the device data*** associated with the particular dimensional manipulation" (emphasis added) in lines 10 – 11 of the claim. This limitation can be interpreted as the only communications the logical device control performs are with the device data. However, the claim also recites that the logical device control is in communication with an application (lines 7 – 9 of the claim), and communicates with a plurality of physical devices having device data (lines 11 – 13 of the claim). It is not clear how the logical device control can *only communicate with the device data* yet still perform the other claimed communications.

Claim 21 recites the limitation "wherein the logical device control only ***communicates with the device data*** associated with the particular dimensional manipulation" (emphasis added) in lines 10 – 11 of the claim. This limitation renders the claim indefinite. The above limitation refers to the data as the target of a communication. In computer systems, data cannot be a target of a communication, but instead is used in a communication to a target. Therefore, it is not clear how the logical device control can communicate with device data since data is not a valid target for a communication.

Allowable Subject Matter

5. Claims 1, 3 – 9, and 21 – 29 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 1st and 2nd paragraphs, set forth in this Office action.

6. The following is a statement of reasons for the indication of allowable subject matter:

Claims 1, and 3 – 9 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 1st and 2nd paragraphs because the prior art of record fails to teach or suggest alone or in combination ***a logical device code segment defined to only enable a particular type of dimensional control, the logical device code segment being in communication with a physical device code segment, the logical device code segment receives the device data from the physical device code segment and identifies the device data for interfacing with the particular***

type of dimensional control and ***wherein the logical device code segment is defined for a particular type of dimensional control and not for controlling any particular property of the physical device or properties of other physical devices, this the logical device code segment provides the application code segment a capability to communicate with a plurality of physical devices, so long as each of the physical devices has device data with the particular type of dimensional control***, as required by independent claim 1***, in combination with the other claimed limitations*** (emphasis added). Support for this limitation is found on page 10 line 14 – page 11 line 2 and figure 3 of the current specification. Previously cited reference "The Evolution of Jini™ Technology In Telematics" by Judith Arato and Steven Knudsen (hereinafter Arato) teaches a telematics system with a device lookup table that registers devices and their interfaces in the system (Arato; Figure 1 "JMatos"). An application program then looks for a registered device and downloads its interface (Arato; Figure 1 Item 5). The application then uses the downloaded interface to interact with the device (Arato; Figure 1 Item 6). Arato does not teach or suggest the logical device code segment as claimed by applicant. This deficiency of Arato is pointed out by applicant in the response filed 16 January 2007 on page 7 paragraph 4. Also, Arato does not teach or suggest the use of dimensional controls as the physical devices. Applicant has discussed this limitation in the response filed 16 January 2007 on page 7 paragraph 6. Newly found reference US Patent No. 7,076,336 (hereinafter Murray) teaches a hardware abstraction layer (HAL) for use in a robotics system. Murray teaches that the HAL can include communications between high-level software and system devices, resource drivers corresponding to available resources that translates between device level measurements from the device and real-world measurements for the robot (Murray; Col 2 Lines 8 – 29). However, Murray does not teach or suggest the logical device code segment as claimed and the use of dimensional controls as the physical devices.

Claims 21 – 29 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 1st and 2nd paragraphs because the prior art of record fails to teach or suggest alone or in combination defining ***one logical device control, the logical device control being defined to control only a particular dimensional manipulation*** and ***wherein the logical device control only communicates with the device data associated with the particular dimensional manipulation, and the logical device control communicates with a plurality of physical devices having device data associated with the dimensional manipulation***, as required by independent claim 21, ***in combination with the other recited claim limitations*** (emphasis added). Support for this limitation is found on page 10 line 14 – page 11 line 2 and figure 3 of the current specification. Previously cited reference "The Evolution of Jini™ Technology In Telematics" by Judith Arato and Steven Knudsen (hereinafter Arato) teaches a telematics system with a device lookup table that registers devices and their interfaces in the system (Arato; Figure 1 "JMatos"). An application program then looks for a registered device and downloads its interface (Arato; Figure 1 Item 5). The application then uses the downloaded interface to interact with the device (Arato; Figure 1 Item 6). Arato does not teach or suggest the logical device code segment as claimed by applicant. This deficiency of Arato is pointed out by applicant in the response filed 16 January 2007 on page 8 paragraph 2. Also, Arato does not teach or suggest the use of dimensional manipulation of the physical devices. Applicant has discussed this limitation in the response filed 16 January 2007 on page 7 paragraph 6. Newly found reference US Patent No. 7,076,336 (hereinafter Murray) teaches a hardware abstraction layer (HAL) for use in a robotics system. Murray teaches that the HAL can include communications between high-level software and system devices, resource drivers corresponding to available resources that translates between device level measurements from the device and real-world measurements for the robot (Murray; Col 2 Lines 8 – 29). However, Murray does not teach or suggest the logical device code segment as claimed and the use of dimensional manipulations of the physical devices.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Franklin whose telephone number is (571) 272-0669. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Richard Franklin
Patent Examiner
Art Unit 2181

DONALD SPARKS
SUPERVISORY PATENT EXAMINER